

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 Higuera Street, Suite 2000
San Luis Obispo, CA 93401-5427

WASTE DISCHARGE REQUIREMENTS ORDER NO. 99-027
Waste Discharge Identification No. 3 27S013450

For
LEWIS ROAD CLASS III LANDFILL
Monterey County

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds that:

1. The Salinas Valley Solid Waste Authority, hereafter "Discharger") owns and operates the Lewis Road Class III Landfill (hereafter "Landfill").

to cover all items of Order No. 93-84 adopted by the Board on October 8, 1993.

Physical Description

2. The Landfill is located in northern Monterey County, on Lewis Road, approximately four miles southeast of Watsonville and three and a half miles west of Aromas (T12S, R2E, Section 24B, MD B&M), as shown on Attachment A. It occupies an area of about 18 acres in the northwestern portion of a 124-acre parcel. The Assessor's Parcel No. for the site is APN-412-102-6.

5. The Landfill is located in low lying vegetated hills above the Pajaro River Valley at elevations between approximately 100 to 480 feet above MSL. The Landfill and an adjacent soil borrow area are on the south facing slope of a ridge within a small natural topographic depression.

3. Proposed Waste Discharge Requirements Order No. 99-027 (Order) revises and updates Order No. 94-76 to incorporate criteria currently applicable to solid waste disposal sites, particularly:

6. Land use within ¼ mile radius of the landfill consists primarily of rural density residential and low density residential usage and unimproved watershed areas. The area immediately to the southwest and south of the landfill was formerly leased for cultivation, but is no longer used for that purpose. Several single family residences are located along Lewis Road north of the landfill parcel and along San Miguel Road southeast of the parcel. A eucalyptus grove borders the landfill area to the north and east.

a. criteria established in California Code of Regulations, Title 27, Division 2, *Solid Waste* (Title 27), effective July 18, 1997; and

7. The currently permitted Landfill parcel is not within any designated wetlands.

b. criteria established in 40 CFR Parts 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule (Subtitle D), as promulgated October 9, 1991.

4. This Order replaces Order No. 94-76, as adopted on September 9, 1994. Order No. 94-76 regulated all waste discharges to the Landfill. Additionally, this Order is intended

8. An 18-acre area is currently permitted for municipal solid waste disposal operations. The waste disposal "footprint" occupies an area of approximately 14 acres; an adjacent soil borrow area occupies an additional approximately 11-acre area.

9. The site is underlain by the Pleistocene age Aromas Sand Formation to depths of approximately 600 to 800 feet. Underlying the Aromas Sand formation is the Purisima formation, a marine deposit of the Miocene age. The sands that make up the Aromas formation were deposited by eolian (wind-related) and fluvial (river- and stream-related) processes. Sediments encountered in borings drilled at the site include poorly graded, fine-grained quartzose sand with little or no clay or silt (typically less than 5 percent fines). Most of the surface soils at the Landfill have been mapped as an Arnold Loamy Sand with a 15 to 50 percent slope creating high runoff and erosion potential. The typical surface appearance is a dark brown, highly permeable (6.0 to 20.0 inches of infiltration per hour) loam sand.
 10. The regions' structural setting is complex. Major structures trend northwest to southeast, with secondary structures oriented east to west. Major regional structures include the San Andreas and Vergeles faults, located 4 and 1.2 miles northeast of the site, respectively. No known faults are believed to occur beneath the site. Under maximum probable earthquake loading conditions, permanent deformations for both Landfill and excavation slopes are estimated to be less than two feet.
 11. The Discharger's data demonstrate natural geologic materials between the Landfill's base and groundwater cannot ensure that degradation of beneficial uses of groundwater beneath or adjacent to the Landfill will not occur.
- Water Resources**
12. The site is located within the Bolsa Nueva Hydrologic Unit (306.00).
 13. The Landfill is not within the 100 year flood plain, as verified by the Federal Emergency Management Agency Flood Insurance Map for Monterey County, California (unincorporated areas and Panel 15 of 1025, effective August 5, 1986). The site lies south of and approximately 200 feet above the Pajaro River floodplain.
 14. The Landfill vicinity experiences a Mediterranean-type climate with year-round temperatures ranging between 50°F to 70°F. The annual average precipitation is approximately 15-1/2 inches with about 90 percent of the rainfall occurring from November through April. Mean annual evaporation at the Santa Rita weather station, located approximately 10-1/2 miles southwest of the site, is about 45 inches.
 15. Surface water runoff in the general vicinity of the site is predominantly toward the west to southwest. Drainage from the site enters an unnamed ephemeral creek located approximately 2.25 miles southwest of the site. This stream discharges into Elkhorn Slough approximately 3 miles downstream. Elkhorn Slough is saline and not used for drinking purposes. The slough is a bird sanctuary and a small scale recreational fishing area. The potential for a release is low due to the overland distance to surface water.
 16. Drainage at the site flows either northward to the Pajaro River or southward toward Elkhorn Slough. No perennial streams exist within one mile of the site. However, three small unnamed ponds or lakes are located within one mile of the Landfill. Uncontaminated runoff above the Landfill is diverted away from the site by a "V" ditch. Surface water runoff from the active landfill area is directed to the southeast portion of the Landfill where it flows into a drop inlet of corrugated metal pipe (culvert) placed on the slope. Outfall from the culvert terminates in a shallow siltation basin. A bench has been constructed adjacent to the southeastern edge of the Landfill area to prevent or minimize runoff from the disposal area. A sedimentation basin has been constructed adjacent to the southwest toe of the Landfill.
 17. The vadose zone in the area near the Landfill appears to range in thickness from approximately 55 feet near monitoring well E1 to greater than about 190 feet in the vicinity of monitoring well LR-8. The vadose zone beneath the site is comprised of the Aromas Sand Formation. Exploratory borings completed at the site indicated the primary

sediment type encountered during drilling is sand.

18. The uppermost water-bearing zone beneath the site occurs in the Aromas Sand Formation. Groundwater monitored in wells LR-E1, LR-E4, LR-7 and LR-8 as shown on Attachment B, appears to represent perched groundwater overlying a deeper regional aquifer. Groundwater intercepted by these wells ranges in elevation from about 205 to 230 feet above mean sea level (MSL). The perched layers reportedly include units of clay sand or sequences of clay, sand, and clayey sand ranging in thickness from less than about one foot to several tens of feet.
 19. Perched groundwater directly beneath the Landfill area ranges from at least 135 feet below ground surface (bgs) near the southeastern edge of the Landfill area to greater than about 189 feet bgs at the western edge of the Landfill area. Groundwater southwest of the Landfill is approximately 55 feet bgs. Monitoring well E1 has historically (since April 1987) had a depth to groundwater of approximately 40 feet. Groundwater in the perched water bearing zone appears to flow to the southwest, with a horizontal gradient ranging between 0.004 and 0.01 and a velocity of between 0.023 and 0.057 feet per day.
 20. A deeper (regional) aquifer reportedly underlies the site at an elevation of approximately 10 to 20 feet above MSL and is monitored by the Alanis well which is located approximately 500 feet southwest of the Landfill property boundary and 750 feet southwest of the refuse boundary. This well has a total depth of 356 feet bgs, is perforated between depths of 156 to 356 feet bgs, and had a static water depth of 209 feet bgs (i.e., an elevation of about 15 feet above MSL) at the completion of drilling. Groundwater flow in the deeper water-bearing zones is primarily controlled by lithology and structure. Groundwater in this zone is reported to flow generally southwestward, being influenced by regional structure. Groundwater flow in the underlying Purisima Formation is also probably southwestward.
 21. Groundwater in the Salinas Valley near the Landfill site is a primary source of irrigation and domestic water supplies. A total of 79 domestic and irrigation wells are known to be located within one mile of the Landfill. A number of additional wells may lie within one mile of the site; however, due to incomplete documentation, the exact location of these wells has not been confirmed.
- Beneficial Uses**
22. This Order implements the Water Quality Control Plan, Central Coast Basin (Basin Plan). The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters.
 23. Present and anticipated beneficial uses of surface water downgradient of the discharge that could be affected by the discharge include:
 - a. industrial service supply;
 - b. groundwater recharge;
 - c. water contact recreation;
 - d. non-contact water recreation;
 - e. wildlife habitat;
 - f. warm fresh water habitat; and
 - g. fish migration.
 24. Present and anticipated beneficial uses of groundwater in the vicinity of the discharge include:
 - a. domestic supply; and
 - b. agricultural supply.
- Landfill Specifics**
25. In addition to this Order, the site is permitted to operate as a Class III facility by Solid Waste Facilities Permit No. 27-AA-003, which is administered by Monterey County

Environmental Health Division, the Local Enforcement Agency.

26. Disposal operations have been conducted at the Landfill since 1947. Several operators managed disposal of wastes on an annual contract basis between 1947-1972. The Landfill was initially developed using the cut-and-cover trench method of disposal. Sometime between 1950's and the early 1960's, a burn and demolition dump was operated at the Landfill. Between 1958 and 1963, the site is reported to have received primarily oil, diesel, and tank bottoms from an unknown oil refinery. The Landfill property was purchased by the Monterey County Department of Public Works in 1972, and was operated as a County-managed free site until 1978, when its management was taken over by a private contracting firm (Rural-Garbage and Dispos-All Services) that charged fees. Monterey County took over disposal operations at the site in 1972, under an agreement with Rural Dispos-All. In October 1997, the Salinas Valley Solid Waste Authority assumed ownership of the landfill from the County of Monterey.
27. In 1993, a screening site inspection of the Lewis Road Landfill was requested by the United States Environmental Protection Agency (EPA) pursuant to the authority of the Comprehensive Environment Response, Compensation, and Liability Act of 1980 (CERCLA) and the Reauthorization Act of 1986 (SARA). An investigation was conducted by Ecology and Environment, Inc.'s Field Investigation Team. On May 11, 1994, a Remedial Site Assessment Decision was made by USEPA regarding the landfill site stating that further remedial assessment under CERCLA (Superfund) was not required because the site did not qualify for further remedial site assessment under CERCLA.
28. The total Landfill facility consists of 124 acres, of which approximately 18 acres are permitted for nonhazardous solid waste disposal. To date, the entire Landfill area is unlined. All future refuse placement will be within existing permitted limits, over existing refuse fill areas until final permitted elevation is reached. No

lateral expansions (refuse placement outside the Designated Disposal Area) have been proposed. An older portion of the Landfill, as depicted on **Attachment B**, has been identified on previous site plans as having reached final refuse grades.

29. The Landfill is constructed by the area fill and cover disposal method. Waste is placed in lifts averaging about 15 feet in thickness. The refuse is compacted in two feet thick layers with slopes less than or equal to 0.4 percent. The Landfill receives approximately 60 tons per day of non-hazardous solid waste and serves residents of northern Monterey County, including Watsonville and southern Santa Cruz County.

The Landfill has a capacity of 320,000 cubic yards based on a final elevation of 450 feet above MSL. Present projections indicate the Landfill will be operational until the year 2004. Years of operation and remaining capacity are based on current permitted Landfill boundaries and elevations, as depicted on **Attachment B**.

Currently, wastes are placed in the northern portion of the Landfill. Approximately 80 percent of the waste consists of residential wastes disposed by the public. The remaining 20 percent consists of residential, agricultural, commercial, and industrial wastes disposed by commercial haulers. No liquid or hazardous wastes are accepted at the site. A borrow area located immediately southeast of the Landfill is excavated to provide daily cover soil.

The current monitoring network at the site consists of five groundwater monitoring wells, three lysimeters, seven gas probes, and two surface water monitoring points.

30. In June 1995, off-site gas migration was detected in monitoring probes. A landfill gas extraction and destruction (flare) system was installed and began operation in September 1997.
31. In September 1995, in response to evidence of a release of inorganic constituents (primarily chloride, sulfate and total dissolved solids) from the landfill to groundwater, the site was

placed into an Evaluation Monitoring Program (EMP) per requirements of California Code of Regulations, Title 23, Division 3, Chapter 15, Article 5.

32. Vadose zone monitoring has shown the presence a number of volatile organic compounds, indicating a release of organic constituents to the vadose zone.
33. An Evaluation Monitoring Program feasibility study was completed and submitted on September 3, 1996.
34. The current Evaluation Monitoring Program consists of regrading of landfill slopes, installation of a landfill gas extraction system and increased water quality monitoring. An expanded monitoring system and upgrading of the landfill gas extraction system is proposed. Provision C.15 addresses additional requirements for the EMP and preliminary Corrective Action Program (CAP).
35. A Final Closure and Post-Closure Maintenance Plan per requirements of Title 27, Chapter 3, Subchapter 5 and Chapter 4, Subchapter 4, was submitted February 1998.

Statements of Regulation

36. This Order implements the prescriptive standards and performance goals of Title 27, as adopted by the State Water Resources Control Board on July 18, 1997.
37. Wastes containing greater than one percent (>1%) friable asbestos are classified as hazardous under California Code of Regulations, Title 22. Since such wastes do not pose a threat to water quality, Section 25143.7 of the Health and Safety Code permits its disposal in all permitted landfills, providing waste discharge requirements specifically allow the discharge and the wastes are handled and disposed in accordance with other applicable State and Federal statutes and regulations.

38. On October 9, 1991, the United States Environmental Protection Agency (USEPA) promulgated regulations pertaining to solid waste disposal facilities known as 40 CFR, Parts 257 and 258 Solid Waste Disposal Facility Criteria, Final Rule (also known as Subtitle D). Subtitle D regulations establish minimum criteria for location, design, operation, clean-up, and closure, of municipal solid waste landfills. California is authorized by USEPA (an "Approved" State) to implement the Federal Subtitle D regulations. A phased implementation of Subtitle D requirements began on October 9, 1991 and ended on October 9, 1997. Currently all active landfills must comply with Subtitle D regulations.

39. Discharge of waste is a privilege, not a right, and authorization to discharge waste is conditioned upon the discharge complying with provisions of Division 7 of the California Water Code and with any more stringent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure regulatory conditions are met and mitigate any potential changes in water quality due to the project.

40. This Order contains prohibitions, discharge specifications, and provisions intended to protect the environment by mitigating or avoiding impacts of the project on water quality. This Order is for an existing facility and therefore is exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15301.

Board Dates

41. On March 5, 1999, the Board notified the Discharger and interested agencies and persons of its intention to update waste discharge requirements for this discharge and has provided them with a copy of the proposed Order and an opportunity to submit written comments.

May 21, 1999

42. After considering all comments pertaining to this discharge, during a public hearing on May 21, 1999, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED pursuant to authority in Section 13263 of the California Water Code, the Salinas Valley Solid Waste Authority, its agents, successors, and assigns may discharge wastes at the Lewis Road Class III Landfill, providing compliance is maintained with the following:

(Throughout this Order regulations are directly referenced or footnotes are listed to indicate the source of requirements specified. Footnotes are as follows:

- a CCR, Title 27, Division 2 (Title 27)*
- b Water Quality Control Plan, Central Coast Basin (Basin Plan)*
- c CFR, Part 257 and 258 (Subtitle D)*
- d California Water Code)*

A. DISCHARGE PROHIBITIONS

1. Discharge of waste to areas outside the "Designated Disposal Area", as identified in Attachment B is prohibited.
2. Discharge of wastes within the "Designated Disposal Area", where refuse has not been placed, is prohibited, unless a containment system that includes a composite liner and leachate collection and removal, is provided.^c
3. Discharge of "hazardous" waste, except for waste that is hazardous due only to its asbestos content, is prohibited. For the purposes of this Order, the term "hazardous" waste is as defined in Title 27, §20164.^a
4. Discharge of "designated" waste is prohibited.^a "Designated" waste is defined in California Water Code §13173.
5. Discharge of bulk or containerized liquid wastes, as defined by EPA Solid Wastes Testing Method 9095 (Paint Filter Liquids Test), is prohibited unless the waste and or container is normal household waste other than septic waste.^c

Exemptions to discharging wastes containing less than 50% solids by weight may be granted by the Executive Officer if the Discharger demonstrates the discharge will not exceed the moisture-holding capacity of the Landfill unit(s).^a

Placement of de-watered domestic sludge as soil amendment to promote vegetation over intermediate or final cover may be allowed with written Executive Officer approval.

6. Ponding of liquids over solid wastes is prohibited.
7. Discharge of wastes within five (5) feet of the highest anticipated groundwater table elevation is prohibited.^a
8. Discharge of waste within 50 feet of the property line, 100 feet of surface waters, or 100 feet of domestic and agricultural water supply wells is prohibited.
9. Discharge of waste to surface waters, natural drainage(s), or flood plains is prohibited.^b
10. Discharge of wastes that would reduce or impair the integrity of containment structures is prohibited.^a
11. Discharge of wastes that, if commingled with other wastes in the Landfill, could produce violent reaction, fire, explosion, or hazardous reaction products is prohibited.^a
12. Discharge of leachate or landfill gas condensate to unlined areas is prohibited.

B. DISCHARGE SPECIFICATIONS

General Specifications

1. The Discharger shall implement attached Monitoring and Reporting Program (Monitoring Program) No. 99-027, and comply with Title 27, Division 2, Subchapter 3, *Water Monitoring*, for purposes of detecting, characterizing, and responding to

releases to groundwater, surface water, or the unsaturated zone.^a

2. Discharge of waste shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed the Water Quality Protection Standard, as set forth in the Monitoring Program, in any monitored media at any Monitoring Point assigned to Detection Monitoring.^a
3. Discharge of waste shall neither cause nor contribute to a condition of pollution or nuisance to waters of the State, or in any way cause unreasonable impairment of State waters' beneficial uses.^{a,d}
4. The handling and disposal of asbestos containing wastes shall be in accordance with all applicable Federal, State, and Local statutes and regulations.
5. Ash wastes, that are tested and shown to be non hazardous, may be landfilled.^a
6. Wastes discharged in violation of this Order and/or applicable State (Title 27, Division 2) and Federal (CFR, Title 40, Part 257 & Part 258) shall be removed and relocated.

Wet Weather (November through April)

7. By October 1 of each year precipitation and drainage controls that are designed, constructed, and maintained to meet the performance standard(s) of Title 27 §20365, shall be in place.
8. The active working face shall be confined to the smallest area practicable.
9. Interim cover (daily or intermediate) shall be designed to minimize percolation through waste. Alternative daily cover materials, such as polyurethane tarps, are encouraged. Alternative cover material must be approved by the Executive Officer and the California Integrated Waste Management Board.^a

10. Areas that will not be active during the wet season shall receive a minimum one (1) foot thick compacted soil cover designed and constructed to minimize percolation of precipitation through wastes. Vegetation shall be planted and maintained over these areas to further minimize infiltration and erosion. The soil cover shall be in-place by October 1 of each year. Alternative cover materials may be considered. Alternative cover material must be approved by the Executive Officer and the California Integrated Waste Management Board.
11. The Discharger shall monitor potential releases from the Landfill related to surface water runoff by complying with all National Pollutant Discharge Elimination System Stormwater Monitoring Program requirements.

Design Criteria

12. Landfill containment structures shall be designed, constructed, and maintained to contain fluid, including landfill gas, waste, and leachate, as required to provide the reasonable protection of aquatic beneficial uses and the prevention of nuisance.^d
13. All Landfill units, containment structures and drainage facilities shall be designed and constructed under the direct supervision of a California registered civil engineer or a certified engineering geologist, and shall be certified by that individual as meeting the prescriptive standards and performance goals of all State and Federal landfill regulations prior to waste discharge.
14. Construction of containment systems and final cover systems shall be in accordance with a Construction Quality Assurance plan certified by an appropriately registered professional to satisfy the requirements of Title 27, §20324.
15. Containment structures shall receive a final inspection and approval of construction by Regional Board staff.

16. Engineered alternatives, to the construction or prescriptive standards of State and Federal landfill regulations, will be considered. Alternative designs shall meet the requirements of Title 27, §20080(b) and receive written approval of the Executive Officer.
17. Landfill units, existing and proposed, shall be designed to withstand the maximum probable earthquake (as defined in Title 27 §20164) without damage to the foundation or to the structures which control leachate, surface drainage, or erosion, or gas.
18. A stability analysis, meeting the requirements of Title 27, §21750(f)(5), shall be performed for all designs that influence the containment system.
19. Landfill precipitation control facilities shall be designed, constructed and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and over-topping due to a 24 hour precipitation event with a predicted frequency of once in 100 years.^a
20. Hydraulic conductivity of containment structures shall be determined primarily by appropriate field test methods in accordance with accepted civil engineering practice. The results of laboratory tests and field tests shall be compared to evaluate concurrence of the methods. For liner components laboratory conductivity shall be run with both water and leachate.

Final Closure

21. Landfill closure shall meet the requirements of Title 27, Subchapter 5, *Closure and Post-Closure Maintenance* and be approved by the Executive Officer.
22. The goal of landfill closure, including but not limited to the installation of a final cover, is to minimize the infiltration of water into the waste, thereby minimizing the production of leachate and landfill gas.

23. Final cover systems shall be designed and maintained to meet closure performance goals throughout the post closure period of the unit.
24. The Discharger shall implement final closure activities as soon as reasonable after a Landfill unit or portion of a unit reaches final fill elevation. Closure activities shall be consistent with the approved closure plan and schedule.^a

C. PROVISIONS

General Provisions

1. Order No. 94-76 "Waste Discharge Requirements for Lewis Road Class III Landfill," adopted by the Board on September 9, 1994, is hereby rescinded.
2. The Discharger shall maintain a copy of this Order at the Landfill and make it available at all times to regulatory agency personnel and to facility operating personnel, who shall be familiar with its contents.
3. The Discharger shall comply with California Code of Regulation, Title 27, Division 2 (Title 27), Code of Federal Regulations, Title 40, Parts 257 and 258, and all other applicable State and Federal landfill regulations whether or not they are specifically referred to in this Order.
4. The Discharger shall be responsible for accurate waste characterization, including determinations of whether or not wastes will be compatible with containment features and other wastes.^a
5. The Discharger shall have a continuing responsibility to assure protection of beneficial uses of waters, from discharged wastes and from gases and leachate generated by discharged waste.
6. The Discharger shall obtain and maintain assurances of financial responsibility for site closure and for initiating and completing

corrective action for all known or reasonably foreseeable releases from the Landfill in accordance Title 27, Chapter 6.^a

Reporting

7. Documentation and reporting for the Landfill shall comply with Title 27, Chapter 4 *Documentation and Reporting For Regulatory Tiers, Permits, WDRs, and Plans*. Additional reporting and notification requirements are included in the Attached Monitoring and Reporting Program.
8. A Joint Technical Document addressing all aspects of site operations, planning, and permitting shall be developed in accordance with Title 27, §21585. All submittals that address topics encompassed by the Joint Technical Document shall be submitted as numerically sequential addendum to the document.
9. Any person signing a report makes the following certification, whether it is expressed or implied:

"I certify under penalty of perjury I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
10. All reports shall be signed as follows:
 - a. For a corporation-by a principal executive officer of at least the level of vice president*;
 - b. For a partnership or sole proprietorship-by a general partner or the proprietor, respectively*;
 - c. For a public agency-by either a principal executive officer or ranking elected official*; or,
 - d. Engineering reports-by a California Registered Civil Engineer or Certified Engineering Geologist.

* or their "duly authorized representative."
11. Except for data determined to be confidential under Section 13267 (b) of the California Water Code, all reports prepared in accordance with this Order shall be available for public inspection at the Board office.^d
12. Any report or any amendment or revision thereto which proposes a design change that might affect a Unit's containment features or monitoring systems shall be approved by a registered civil engineer or a certified engineering geologist.
13. The Discharger shall submit a 'Wet Weather Preparedness Report' by **November 1, of each year**. The report must address, in detail, compliance with all wet weather preparedness related specifications (e.g., **Discharge Specifications B.7-B.11**) of this Order, and all other relevant regulatory criteria.
14. By **August 31, 1999**, the Discharger shall submit an **evaluation of the existing cover over the area filled to final grade**. The evaluation shall include composition and thickness of cover and include a discussion of precipitation rates and estimates of infiltration.
15. By no later than **November 30, 1999**, the Discharger shall submit an **"Evaluation Monitoring Program and Corrective Action Report"** which evaluates the extent of all groundwater, vadose zone, and surface water impacts, discusses the effectiveness of monitoring, evaluation and corrective action activities to date, and proposes future measures to better evaluate, minimize, contain and/or eliminate further impacts. The report shall include a discussion of infiltration through the cover and its impacts on groundwater contamination.

16. Included in the Summer/Fall Semiannual Monitoring Report each year, beginning **October 31, 2000**, shall be a **"Corrective Action Plan Report"** which evaluates monitoring data and discusses the effectiveness of all corrective action measures taken, including source control and measures to reduce infiltration of water into the Landfill.

Notification

17. The Discharger shall comply with the notification requirements of Title 27, Article 4(c). The Attached Monitoring and Reporting Program includes additional reporting and notification requirements.
18. In the event of any change in ownership or responsibility of this Landfill, the Discharger shall notify the Board in writing of the proposed change. This notification shall be given prior to the effective date of the change and shall include a statement by the new Discharger that construction, operation, closure, and post-closure maintenance will be in compliance with applicable State and Federal regulations and the existing Waste Discharge Requirements.
19. Discharger shall promptly notify the Executive Officer of any of the following conditions:
- a. Violation of a discharge prohibition;
 - b. Slope failure;
 - c. Leachate detection in previously dry leachate collection and removal system; and
 - d. Leachate seep or significant production change.^a
20. Any condition which threatens the Landfill's containment integrity shall be promptly corrected and reported to the Executive Officer.^a
21. The Discharger shall notify the Board at least 180 days prior to beginning any final Landfill closure activities. If there is no approved Closure Plan, the Discharger must submit a complete Closure Plan at least 240 days prior to beginning any Landfill closure activities.^a
22. The Executive Officer may require partial and/or final closure of any Landfill unit(s), regardless of whether such unit(s) has reached design capacity, for the protection of water quality. Such a requirement will be made in writing.^a
23. The post-closure maintenance period shall continue until the Board determines that remaining wastes in the Landfill will not threaten water quality. Post-Closure maintenance cost estimates shall be based on thirty years of maintenance.^a
24. Financial assurances, for initiating and completing corrective action for all known or reasonably foreseeable releases, for closure, and for post-closure maintenance, must be obtained and maintained in accordance with Title 27, Chapter 6. Estimates of cost, for closure, post-closure maintenance, and release response, shall be based on site specific conditions and current approved plans.^a
25. Hazardous waste warning signs that adequately inform and warn users of hazardous waste restrictions shall be posted on a legible roadway sign at the entrance in both English and Spanish. The signs shall also list penalties for illegal dumping. A specific list of Hazardous Wastes and other types of materials prohibited at the Landfill shall be provided to commercial waste haulers—and shall be available to all other users upon request.
26. Construction, alteration, destruction, or abandonment of monitoring wells shall comply with all notice and reporting requirements of the State Department of Water Resources as require by Sections 13750 through 13755 of the California Water Code.^d
27. Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267

of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.^d

28. The Discharger and/or any person who violates this Order and/or who intentionally or negligently discharges waste, causes or permits waste to be deposited where it is discharged to waters of the state, may be liable for civil and/or criminal remedies, as appropriate, pursuant to the California Water Code.^d
29. As part of the annual report required by the attached Monitoring and Reporting Program, the Discharger shall address compliance with all terms of this Order.
30. The Discharger shall review, for compliance with Subchapter 2 of Title 27, the Landfill's classification and siting (Article 3), and construction standards (Article 4). **A report discussing the site's compliance with each specific requirement (e.g. five foot separation from groundwater as required by §20240(c)) shall be submitted by April 30, 2000.** In cases where standards are not currently met, a schedule for retrofitting the facility shall be submitted or a finding that the retrofit is not feasible shall be made. Feasibility determination shall be made in accordance with requirements for engineered alternatives, Title 27, §20080(c).
31. The Discharger must submit a copy of the Emergency Response Plan (§21132) by **April 30, 2000.**
32. The Board will review this Order periodically and may revise its requirements when necessary.

Title 27 Site Documentation Update

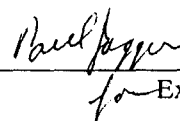
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May 21, 1999

The following summary is provided for the convenience of Discharger. The dates and references are intended to follow the Order; however, where conflict occurs the Order shall be followed.

TASK	IMPLEMENTATION DATE
Runoff diversion and erosion prevention [Specification No. B.9]	October 1, of each year
Minimum one foot cover over entire active Waste Management Unit [Specification No. B.10]	October 1, of each year
Vegetation placement over entire Landfill area [Specification No. B.10]	October 1, of each year
REPORT	DUE DATE
Wet Weather Preparedness Report [Provision No. C.13]	November 1, of each year
Evaluation of Existing Cover [Provision No. C.14]	August 31, 1999
Evaluation Monitoring Program and Corrective Action Report [Provision No. C.15]	November 30, 1999
Corrective Action Plan Report [Provision No. C.16]	Annually, beginning October 31, 2000
Compliance Report [Provision No. C.30]	Annually, beginning April 30, 2000
Emergency Response Plan [Provision No. C.31]	April 30, 2000

I, **Roger W. Briggs**, Executive Officer, do hereby certify the foregoing is a full true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 21, 1999.



for Executive Officer

LEWIS ROAD CLASS III LANDFILL
MONTEREY COUNTY
June 1, 1999

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Watsonville, CA 95074

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STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 Higuera Street, Suite 200
San Luis Obispo, California 93401-5427

MONITORING AND REPORTING PROGRAM NO. 99-027
Waste Discharger Identification No.3 27S013450

FOR

LEWIS ROAD
CLASS III LANDFILL
Monterey County

PART I: MONITORING AND OBSERVATION SCHEDULE

Unless otherwise indicated, all monitoring and observations shall be reported as outlined in Part III.

A. SITE INSPECTIONS

The Discharger shall inspect the Landfill in accordance with the following schedule, and record, at a minimum, Standard Observations as defined in Part IV.

Site Inspection Schedule:

1. during the wet season (October through April), following each storm which produces stormwater discharge, with inspections performed at least monthly; and
2. during the dry season a minimum of one inspection every three months.

B. INTAKE MONITORING

The Discharger shall maintain a daily record of the waste stream. The record shall include the following:

1. weight and volume of waste received;
2. running totals of volume received, volume remaining for waste placement, and site life expectancy;
3. current fill area;
4. waste type and diversion quantities; and
5. log of random load checking program. The log shall contain a record of refused loads, including the type of waste refused, and the date, name, address, and phone number of the party attempting to dispose of the waste.

C. DRAINAGE SYSTEM INSPECTIONS

The Discharger shall inspect all drainage control systems following each storm and record the following information:

1. whether storm storage basins and drainage ditches contain liquids;
2. any apparent seepage from storage basins;
3. general conditions of the facility; and
4. steps taken to correct any problems found during inspection and when taken.

D. RAINFALL DATA

The Discharger shall record the following information:

1. total precipitation during the Monitoring Period;
2. precipitation during the most intense twenty-four hour interval of the Monitoring Period; and
3. return rating of most intense storm (e.g. 25 year, 100 year, etc.)

E. ANALYTICAL MONITORING

The Discharger shall monitor the Landfill in accordance with the following sampling schedule. Monitoring locations are shown on **Attachment B**. Sampling, analyses, and reporting shall comply with **Parts II and III**. Data collection shall occur during the monitoring period and not within 30 days of a previous or subsequent routine sampling event. **Quarterly monitoring periods: Winter (January 1 - March 31); Spring (April 1 - June 30); Summer (July 1 - September 30); Fall (October 1 - December 31).** **Semi-annual reporting: combined Fall/Winter monitoring report due on April 30 and combined Spring/Summer monitoring due on October 31.** The Annual Report is due **April 30** and may be included with the Fall/Winter Semiannual Report.

1. Constituent of Concern Monitoring

The Constituents of Concern (COC) parameter includes all constituents listed in Appendix II to 40 CFR, part 258. Monitoring for COCs shall encompass only those constituents that do not also serve as Monitoring Parameters. Analysis of COCs shall be carried out once every five years at each of the site's groundwater monitoring points, and as required due to an indication of release (Part II.C.4). Wells that have not previously been sampled for COCs shall be sampled and analyzed for all COCs within six months of this program becoming effective.

2. General Parameter Monitoring (Groundwater, Surface Water, Vadose Zone, Landfill Gas, Stormwater)

Sample Location (see Attachment A)	Monitoring Program		Parameter/Frequency	
	Detection	Evaluation	VOC ¹	Inorganic-Parameter ²
LR-E1, well	X	X	Quarterly	Quarterly
LR-E4, well	X	X	Quarterly	Quarterly
LR-7, well	X	X	Quarterly	Quarterly
LR-8, well	X	X	Quarterly	Quarterly
LR-Alanis	X	X	Quarterly	Quarterly
LR-RPL (on-site surface water)	X	X		Quarterly
LR-RPOS (off-site surface water)	X	X		Quarterly
LR-LYS-C2	X	X	Quarterly	Quarterly
LR-LYS-C3	X	X	Quarterly	Quarterly
LR-LYS-C4	X	X	Quarterly	Quarterly
LR-C1, 1 gas probe	X	X	Quarterly (%CH ₄)	
LR-C2, 3 gas probes	X	X	Quarterly (%CH ₄)	
LR-C3, 3 gas probes	X	X	Quarterly (%CH ₄)	
LR-C4, 1 gas probe	X	X	Quarterly (%CH ₄)	
LRCA-1 gas probe	X	X	Quarterly (%CH ₄)	
LRCA-2 gas probe	X	X	Quarterly (%CH ₄)	
LRCA-3 gas probe	X	X	Quarterly (%CH ₄)	
Crawl space 1- gas probe	X	X	Quarterly (%CH ₄)	
Crawl space 2 – gas probe	X	X	Quarterly (%CH ₄)	
Stormwater Sampling				IAW Stormwater Program ³

¹ Volatile Organic Compounds: USEPA method 8260 for liquid, method TO-14 for gas, to be performed annually.

² Inorganic parameters:
 Laboratory: chloride, sulfate, nitrate as nitrogen, TDS, barium, chromium, iron, manganese, nickel, zinc
 Field: pH, EC, temperature, turbidity, dissolved oxygen

³ Stormwater inorganic parameters:
 Laboratory: pH, total suspended solids, EC, and total organic carbon or oil & grease.

3. Stormwater Monitoring

Monitor stormwater discharge point(s) in accordance with your National Pollutant Discharge Elimination System permit.

4. Groundwater Flow Rate and Direction

For each monitored groundwater zone, the Discharger shall measure the groundwater elevation in each available well at least once each quarter, including the times of expected highest and lowest elevations of the water level. The Discharger shall also determine the presence of horizontal and vertical gradients, groundwater flow rate, and flow direction for the respective groundwater zone.

5. Sample Procurement Limitation

For any given monitored medium, the samples taken from Monitoring Points to satisfy the data analysis requirements for a given Monitoring Period shall be collected within a time period not exceeding 30 days, and shall be taken in a manner that ensures sample independence to the greatest extent feasible. Sampling events for separate monitoring periods shall not occur within 30 days of each other.

PART II: SAMPLE COLLECTION AND ANALYSIS AND ANALYSIS OF DATA

A. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analysis shall be performed according to the most recent version of Standard USEPA Methods (USEPA publication "SW-846"), and in accordance with an approved sampling and analysis plan. Water analysis shall be performed by a laboratory certified for these analyses by the State of California. Specific methods of analysis must be identified. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign reports of such work submitted to the Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. In addition, the Discharger is responsible for seeing that the laboratory analysis of samples from Monitoring Points meets the following restrictions:

1. The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., Trace) in historical data for that medium, the analytical method having the lowest Method Detection Limit (MDL) shall be selected.
2. Trace results (results falling between the MDL and the Practical Quantitation Limit) shall be reported as such.
3. Method Detection Limits and Practical Quantitation Limits shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Both limits are defined in Part V and shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived values, the results shall be flagged accordingly, and an estimate of the limit actually achieved shall be included.

4. All quality assurance and quality control (QA/QC) data shall be reported along with the sample results to which it applies. Sample results shall be reported unadjusted for blank results or spike recovery. The QA/QC data submittal shall include:
 - a. the method, equipment, and analytical detection limits;
 - b. the recovery rates, an explanation for any recovery rate that is outside the USEPA-specified recovery rate;
 - c. the results of equipment and method blanks;
 - d. the results of spiked and surrogate samples;
 - e. the frequency of quality control analysis;
 - f. chain of custody logs; and
 - g. the name and qualifications of the person(s) performing the analyses.
5. QA/QC analytical results involving detection of common laboratory contaminants in any sample shall be reported and flagged for easy reference.
6. Non-targeted chromatographic peaks shall be identified, quantified, and reported to a reasonable extent. When significant unknown peaks are encountered, second column or second method confirmation procedures shall be performed in an attempt to identify and more accurately quantify the unknown analyte(s).

B. ANALYSIS OF DATA FOR DETERMINATION OF RELEASE (STATISTICAL AND NONSTATISTICAL)

1. For Detection Monitoring the Discharger shall use statistical methods to analyze COCs and Monitoring Parameters detected in ten percent or more of applicable historical samples. Statistical methods will be used to generate concentration limits as outlined below (Part II.C.). The Discharger may propose and use any statistical method that meets the requirements of California Code of Regulations, Title 27, §20415(e)(7). All statistical methods and programs proposed by the Discharger are subject to Executive Officer approval.
2. The Discharger shall use the following non-statistical method for analyzing constituents which are detected in less than ten percent of applicable historical samples. This method involves a two-step process:
 - a. From constituents to which the method applies, compile a well-specific list of those constituents which exceed their respective MDL. The list shall be compiled based on either the data from the single sample or in cases of multiple independent samples, from the sample which contains the largest number of constituents;
 - b. Evaluate whether the listed constituents meet either of two possible triggering conditions: the list, from a single well, either contains two or more constituents, or the list contains one constituent which equals or exceeds the constituent's PQL. If either condition is met, the Discharger shall conclude that a release is tentatively indicated and shall immediately implement the appropriate re-test procedure under Part III.C.

C. CONCENTRATION LIMIT DETERMINATION (STATISTICAL)

1. For the purpose of establishing Concentration Limits for COCs and Monitoring Parameters detected in more than ten percent of a medium's samples, the Discharger shall:

- a. Statistically analyze existing monitoring data (Part II.B.), and propose, to the Executive Officer, statistically derived Concentration Limits for each COC and each Monitoring Parameter at each Background Monitoring Point (inter-well comparisons) or each Monitoring Point (intra-well comparisons) for which sufficient data exist;
 - b. In cases where sufficient data for statistically determining Concentration Limits does not exist the Discharger shall collect and analyze samples for constituents which require additional data. Once sufficient data are obtained, the Discharger shall submit proposed Concentration Limit(s) to the Executive Officer for approval. This procedure shall take no longer than two calendar years;
 - c. Concentration limits for all Monitoring Parameters and COCs shall be proposed for all new background monitoring points (inter-well comparisons) or all new monitoring points (intra-well comparisons), including any added by this Order, within two calendar years of initial well sampling.
2. Once established, concentration limits shall be reviewed annually by the Discharger. The past year's data will be reviewed for application to revision of concentration limits. When appropriate, new concentration limits shall be proposed.

D. RE-TEST PROCEDURE

1. In the event that the Discharger concludes through statistical or nonstatistical methods that a release has been tentatively indicated, the Discharger shall carry out the reporting requirements of III.C.2. and, within 30 days of receipt of analytical results, collect two new suites of samples for the COCs or Monitoring Parameters at each indicating Monitoring Point, collecting at least as many samples per Monitoring Point as were used for the initial test.
2. Analyze each of the two suites of re-test data using the same statistical method (or non-statistical comparison), that provided the tentative indication of a release. If the test results of either (or both) of the re-test data suites confirms the original indication, the Discharger shall conclude that a release has been discovered and shall carry out the requirements of Part III.C.
3. Re-tests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the COCs or Monitoring Parameter(s) which triggered the indication. When a member of the VOCcomposite parameter is re-tested, the result of the entire VOCcomposite shall be reported. In that case, a re-test shall validate the original release indication even if the detected constituent(s) in the re-test sample(s) differs from those detected in the sample which initiated the re-test.

F. RECORDS TO BE MAINTAINED

Analytical records shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five years. The period of retention shall be extended during the course of any unresolved litigation or when requested by the Executive Officer. Such records shall show the following for each sample:

1. Identity of sample, Monitoring Point from which it was taken, and individual who obtained the sample;
2. Date and time of sampling;

3. Date and time that analyses were started and completed, and the name of personnel performing each analysis;
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
5. Results of analyses, and Method Detection Limit and Practical Quantitation Limit for each analysis; and
6. A complete chain of custody log.

PART III: REPORTING

A. MONITORING REPORT

Written Monitoring Reports shall be submitted semiannually by **April 30 and October 31** of each year. The report shall address all facets of the Landfill's monitoring. Reports shall include all data collected as part of the Monitoring Program, and the following:

1. Letter of Transmittal

A letter transmitting the essential points shall accompany each report. The letter shall include a discussion of violations that occurred since the last such report was submitted and shall describe actions taken or planned for correcting those violations. If no new violations have been discovered since the last submittal, this shall be stated in the transmittal letter. Both the monitoring report and the transmittal letter shall be signed by: for private facilities, a principal executive officer at the level of vice president; for public agencies, the director of the agency. The transmittal letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

2. Compliance Summary

The update shall contain at least:

- a. Discussion of compliance with concentration limits, indication(s) of a release and actions taken to address the release.
- b. For each monitored groundwater body, calculate groundwater velocity and, based upon water level elevations taken during the Monitoring Period, graphically present groundwater flow direction under and around the site.

3. Graphical Presentation of Analytical Data

For each Monitoring Point in each medium, submit, in graphical format, the complete history of laboratory analytical data. Graphs shall effectively illustrate trends and/or variations in the analytical data. Each graph shall plot a single constituent concentration over time at one (for intra-well comparisons) or more (for inter-well comparisons) monitoring points in a single medium. Maximum contaminant levels (MCL) and/or concentration limits shall be graphed along with constituent concentrations where applicable. When multiple samples are taken, graphs shall plot each datum, rather than plotting mean values.

4. Laboratory Results

Laboratory results and statements demonstrating compliance with Part II and results of analyses performed at the Landfill, outside the requirements of this Monitoring and Reporting Program, shall be summarized and reported.

5. Sampling Summary

- a. For each monitoring well addressed by the report: a description of; 1) the method and time of water level measurement, 2) the method of purging and purge rate and well recovery time, 3) field parameter readings, 4) field equipment calibration, and 5) method of disposing the purge water.
- b. For each monitoring point addressed by the report, a description of the type of sampling device used, its placement for sampling, and a description of the sampling procedure (number of samples, field blanks, travel blanks, and duplicate samples taken; types of containers and preservatives used; the date and time of sampling; the name and qualifications of the person actually taking the samples; description of any anomalies or other appropriate observations).

6. Standard Observations

A summary of Standard Observations (Part IV) made during the Monitoring Period.

7. Map(s)

A map or aerial photograph showing monitoring locations, relative physical features, and groundwater contours to the greatest degree of accuracy possible.

B. ANNUAL SUMMARY REPORT

The Discharger shall submit an annual report to the Board covering the previous monitoring year. **The annual Monitoring Period ends March 31.** This report may be combined with the Fall/Winter Semiannual Monitoring Report and shall be submitted no later than **April 30** each year. The annual report must include the information outlined above and the following:

1. Discussion

Include a comprehensive discussion of the compliance record, a review of the past year's significant monitoring system and operational changes, a summary of corrective action results and milestones, and a review of construction projects, with water quality significance, completed or commenced in the past year or planned for the up-coming year.

2. Statistical Limit Review

Statistically derived concentration limits shall be reviewed annually and revised as necessary. Data collected during the year shall be discussed and considered for inclusion in, and determination of, proposed limits for the coming year. For statistical limits that are changed from the previous year, include a comprehensive discussion of the proposed limit for Executive Officer review and consideration.

3. Analytical Data

Complete historical analytical data presented in tabular form and on 3.5" diskettes, in Excel™ format or in another file format acceptable to the Executive Officer.

4. Map(s)

A map, or set of maps, that indicate(s) the type of cover material in place (final, long-term intermediate, or intermediate) over inactive and completed areas.

C. CONTINGENCY RESPONSES

1. Leachate Seep

The Discharger shall, within 24 hours, report by telephone concerning the discovery of previously unreported seepage from the disposal area. A written report shall be filed with the Board within seven days, containing at least the following information:

- a. A map showing the location(s) of seepage;
- b. An estimate of the flow rate;
- c. A description of the nature of the discharge (e.g., pertinent observations and analyses); and
- d. A summary of corrective measures both taken and proposed.

2 Response to an Initial Indication of a Release

Should the initial statistical or non-statistical comparison (under Part II.B.) indicate that a new release is tentatively identified, the Discharger shall:

- a. Within 24 hours, notify the Board verbally as to the Monitoring Point(s) and constituent(s) or parameter(s) involved;
- b. Provide written notification by certified mail within seven days of such determination; and
- c. Perform either of the following:
 - i. Shall carry out a discrete re-test in accordance with Part II.D. If the re-test confirms the existence of a release or the Discharger fails to perform the re-test, the Discharger shall carry out the requirements of Part III.C.4. In any case, the Discharger shall inform the Board of the re-test outcome within 24 hours of results becoming available, following up with written results submitted by certified mail within seven days. or;
 - ii. Make a determination, in accordance with CCR Title 27, §20420(j)(7), that a source other than the waste management unit caused the release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in the groundwater, surface water, or the unsaturated zone.

3. Physical Evidence of a Release

If either the Discharger or the Executive Officer determines that there is significant physical evidence of a new release [Title 27 §20385(a)(3)], the Discharger shall conclude that a release has been discovered and shall:

- a. Within seven days notify the Board of this fact by certified mail (or acknowledge the Board's determination);
- b. Carry out the requirements of Part III C.4. for potentially-affected media; and
- c. Carry out any additional investigations stipulated in writing by the Executive Officer for the purpose of identifying the cause of the indication.

4. Release Discovery Response

If the Discharger concludes that a new release has been discovered the following steps shall be carried out:

- a. If this conclusion is not based upon monitoring for COCs, the Discharger shall sample for COCs at Monitoring Points in the affected medium. Within seven days of receiving the laboratory analytical results, the Discharger shall notify the Board, by certified mail, of the concentration of COCs at each Monitoring Point; this notification shall include a synopsis showing, for each Monitoring Point, those constituents that exhibit an unusually high concentration;

- b. The Discharger shall, within 90 days of discovering the release, submit a Revised Report of Waste Discharge proposing an Evaluation Monitoring and Reporting Program that:
 - (1) Meets the requirements of Title 27, §20420 and §20425; and
 - (2) Satisfies the requirements of 40 CFR §258.55(g)(1)(ii) by committing to install at least one monitoring well directly down-gradient of the center of the release;
 - c. The Discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study meeting the requirements of Title 27, §20420; and
 - d. The Discharger shall immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that the Discharger can meet the requirement [Title 27, §20425] to submit a delineation report within 90 days of when the Board directs the Discharger to begin the Evaluation Monitoring Program.
5. Release Beyond Facility Boundary
- Any time the Discharger concludes (or the Executive Officer directs the Discharger to conclude) that a release from the Landfill has proceeded beyond the facility boundary, the Discharger shall so notify persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons).
- a. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release.
 - b. Subsequent to initial notification, the Discharger shall provide updates to Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
 - c. Each time the Discharger sends a notification to Affected Persons (under a. or b., above), the Discharger shall, within seven days of sending such notification, provide the Board with both a copy of the notification and a current mailing list of Affected Persons.

PART IV: DEFINITION OF TERMS

A. AFFECTED PERSONS

Individuals who either own or reside upon the land that directly overlies any part of that portion of a gas or liquid phase release that may have migrated beyond the facility boundary.

B. CONCENTRATION LIMITS

The Concentration Limit for any given Constituent of Concern or Monitoring Parameter in a given monitored medium shall be either:

- 1. The constituent's statistically determined background value or interval limit, established using an Executive Officer approved method (Part II); or
- 2. In cases where the constituent's Method Detection Limit (MDL) is exceeded in less than 10% of historical samples, the MDL is the concentration limit (see Part II.A).

C. CONSTITUENTS OF CONCERN (COC)

A broad list of constituents likely to be in typical municipal solid waste. The COCs for this landfill are derived from USEPA recommendations and are listed in Part I.E.

D. MATRIX EFFECT

Any increase in the Method Detection Limit or Practical Quantitation Limit for a given constituent as a result of the presence of other constituents, either of natural origin or introduced through a release, that are present in the sample being analyzed.

E. METHOD DETECTION LIMIT (MDL)

The lowest concentration at which a given laboratory, using a given analytical method to detect a given constituent, can differentiate with 99% reliability, between a sample which contains the constituent and one which does not. The Method Detection Limit shall reflect the detection capabilities of the specific analytical procedure and equipment used by the laboratory.

F. MONITORED MEDIUM/MEDIA

Those media that are monitored pursuant to this Monitoring and Reporting Program (groundwater, surface water, vadose zone gas and liquid, leachate, gas condensate, etc.)

G. MONITORING PARAMETERS

A short list of constituents and parameters used for the majority of monitoring activity. The Monitoring Parameters for this Unit are listed in Part I.E.

H. MONITORING PERIOD (frequency)

The duration of time during which a sampling event must occur. The Monitoring Period for the various media and programs is specified in Part I.E. The due date for any given report will be 30 days after the end of its Monitoring Period, unless otherwise stated.

I. PRACTICAL QUANTITATION LIMIT (PQL)

The lowest acceptable calibration standard (acceptable as defined for a linear response or by actual curve fitting) times the sample extract dilution factor times any additional factors to account for Matrix Effect. The PQL shall reflect the quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. PQLs reported by the laboratory shall not simply be restated from USEPA analytical method manuals. Laboratory derived PQLs are expected to closely agree with published USEPA estimated quantitation limits (EQL).

J. STANDARD OBSERVATIONS

For adjacent surface waters, settling ponds, site surface water discharges, along the perimeter of the property, and at the waste unit(s), the following information shall be recorded (as appropriate) and included in monitoring reports:

- Floating and suspended materials of waste origin;
- Discoloration and turbidity;
- Evidence of odors;
- Evidence of beneficial use— presence of water-associated wildlife;
- Flow rate to the receiving waters;
- Evidence of liquid leaving or entering the Unit;

- Evidence of erosion and/or of exposed refuse;
- Stormwater discharge locations for evidence of non-stormwater discharges during dry seasons, and integrity during wet seasons.
- Evidence of ponded water at any point on the waste management facility;
- Integrity of drainage systems

K. RECEIVING WATERS

Any surface water which actually or potentially receives surface or groundwater which passes over, through, or under waste materials or contaminated soils.

L. VOLATILE ORGANIC COMPOUND COMPOSITE MONITORING PARAMETER (VOCcomposite)

VOCcomposite, a composite parameter that encompasses a variety of VOCs. The constituents addressed by the VOCcomposite Monitoring Parameter includes all VOCs detectable using USEPA Methods, 8260 (water) and TO-14 (gas).

Ordered by: *Paul J. [Signature]*
for Executive Officer

Date: *6/2/99*